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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,057	08/01/2001	Valtteri Niemi	324-010477-US (PAR)	4430
2512	7590	04/15/2008	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			DAVIS, ZACHARY A	
			ART UNIT	PAPER NUMBER
			2137	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/920,057	Applicant(s) NIEMI ET AL.	
	Examiner Zachary A. Davis	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11, 12, 17-24, 27, 28, 33-40, 43 and 44 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 13-16, 25, 26, 29-32, 41, 42 and 45-48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A notice of appeal and pre-appeal brief request for review were received on 16 February 2007.

Response to Arguments

2. In view of the pre-appeal brief request filed on 16 February 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Emmanuel L Moise/ SPE

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 11, 12, 17-24, 27, 28, 33-40, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 3rd Generation Partnership Project technical specifications, specifically 3G TS 33.102, version 3.2.0, published October 1999; 3G TS 25.301, version 3.4.0, published March 2000; 3G TS 25.401, version 3.1.0, published January 2000; and 3G TS 25.832, version 3.0.0, published October 1999 (hereinafter collectively referred to as "3G").

In reference to Claim 1, 3G discloses a method for transmitting data between a network using packet-switched TDMA and a user mobile equipment, that includes encrypting data to be transmitted, transmitting the encrypted data, and deciphering the transmitted data (see 3G TS 33.102, page 48, section 8.2.2; 3G TS 25.301, pages 39-41, chapter 8), and that handover can occur between a wideband CDMA network and a packet-switched TDMA network (see 3G TS 25.401, pages 17-18, section 7.2.3, where handover may occur between UMTS and GSM systems, where UMTS uses wideband CDMA and GSM uses packet-switched TDMA; also 3G TS 33.102, pages 33-34, section 6.6.4, where cipher keys are transmitted between the MSC/VLRs during handover and/or new keys can be generated or converted as necessary, and pages 37-

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41, section 6.8, describing conversion functions between authentication in UMTS and GSM; see also 3G TS 25.832, pages 6-12, chapter 5, especially sections 5.6 and 5.7). While these specifications do not explicitly specify that the same encryption algorithm is used in the two types of networks, the above sections do disclose adapting parameters between the wideband CDMA and packet-switched TDMA networks (again, see 3G TS 33.102, pages 33-34 and 37-41, as cited above). Further, it would have been obvious to one of ordinary skill in the art to use the same encryption algorithm in the two network types between which handover takes place; given the finite number of choices of algorithms, and more particular, the choice between using the same algorithm or two different algorithms in the two systems, it would have been obvious to try the two different options. It would have further been rendered obvious to use the same encryption algorithm between networks between which handover takes place, in order to realize the predictable result of reducing overhead as compared to using two different algorithms (where if two different algorithms were used, then all data would have to be decrypted from the first algorithm and re-encrypted under the second algorithm whenever handover occurred).

In reference to Claim 2, 3G further discloses that a format of the parameters includes a number and length of each parameter (3G TS 25.301, pages 40-41).

In reference to Claim 3, it would have further been obvious to one of ordinary skill in the art at the time the invention was made for the implementation of the encryption algorithm to be the same in both the packet-switched TDMA network and the wideband CDMA network, for the reasons detailed above, namely that it would have been obvious

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to try the finite options available, and it further would have been obvious in order to realize the predictable result of reducing overhead as compared to using algorithms that are implemented differently.

In reference to Claims 4 and 5, 3G further discloses a counter parameter (3G TS 25.301, pages 40-41, section 8.2.2.1).

In reference to Claim 6, 3G further discloses the use of a bearer parameter (3G TS 25.301, page 41, section 8.2.2.3).

In reference to Claims 7, 8, 11, and 12, 3G further discloses that the encryption algorithm can be executed in either the MAC layer or the RLC layer and that the counter parameter includes a frame number (3G TS 25.301, pages 40-41, section 8.2.2.1).

Claims 17-24, 27, and 28 are directed to an apparatus, specifically user equipment, that corresponds substantially to the method of Claims 1-8, 11, and 12, and are rejected by a similar rationale.

Claims 33-40, 43, and 44 are directed to an apparatus, specifically a radio access network, that corresponds substantially to the method of Claims 1-8, 11, and 12, and are rejected by a similar rationale.

Allowable Subject Matter

5. Claims 9, 10, 13-16, 25, 26, 29-32, 41, 42, and 45-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening claims.

6. Reasons for indicating allowable subject matter were set forth in the Office action mailed 04 April 2006.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Grilli et al, US Patent 6438117, discloses a system for synchronization for handover in a hybrid GSM/CDMA network.
- b. Tamura et al, US Patent 7236787, discloses procedures for handover and ciphering in a wideband CDMA network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571)272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zad

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2137